So the internet didn't turn out the way we hoped.



Where do we go from here?

The internet hasn't lived up to all our dreams for it. But neither, perhaps, does it conform to the nightmares (of misinformation, of alienation, of exploitation) that so many people spin around it now. In this special issue of The New York Times Magazine, we've tried to see the internet and its likely future as best we can, from as many angles as we can, in the hope that — after decades of imagining it as a utopia, and then a few years of seeing it as a dystopia — we might finally begin to see it for what it is, which is a set of powerful technologies in the midst of some serious flux. Read the introduction by Bill Wasik.

The internet is unequal —



and becoming more so.

Increasingly, for a price, the "luxury internet" can keep you out of the online cesspool. Paying for

goods and services online used to mean you were an easy mark – someone too lazy or untechnical to figure out the necessary hacks and workarounds. Now, subscriptions are a status symbol. And pretty soon, the quality of the internet

Illustration by Mrzyk & Moriceau

you experience will largely be a product of how much you're willing to spend on it. Read more from Kevin Roose.

America's "broadband gap" is shrinking but stubborn.

Deployment of broadband internet — download speeds of 100 megabits per second or faster — has made some progress in recent years, but rural areas still lag behind urban ones. In 2016, one-third of rural Americans could access speeds that fast. As of 2018, 40 percent of rural

America still lacks broadband, according to data from the Federal Communications Commission. The shaded areas in this map show places where at least half the population has access to broadband. - Katile Peek

For now, "5G" doesn't mean much.

The fastest cellular network — beefy enough to stream movies from a bus stop — has taken hold in just a handful of countries worldwide, thanks to hardware struggles in many cities. The networks all call themselves 5G, but different carriers use different technologies, resulting in vastly different speeds. "The whole industry is

kind of building the plane in midair," says Adriane Blum, a spokeswoman for Ookla, a firm that monitors mobile and broadband speeds worldwide. In this graphic, each continent's circle represents the number of cities and towns with 5G networks that are currently online or nearly so. — Katie Peek

In China,



a whole new internet is flowering.

Billions of people are using apps you may have never heard of.

The first generation of Chinese tech giants, known as BAT (Baidu, Alibaba and Tencent), were founded during the desktop internet era. The mobile internet has given rise to a new triumvirate, TMD (Toutiao, Meituan/Dianping and Didi Chuxing) that, along with other mobile-

based companies, have revolutionized every aspect of Chinese life. Many have even grown, octopuslike, to encompass several sectors at once. In this graphic, some of China's top apps are arrayed according to the functions they serve. —Yiren Lu

And the Chinese internet might point the way to a very different future. WeChat got its start as a chat app, but now it has grown into a superapp. With more than a billion monthly active users, it's not just a social network — it has become a payments system, a communication medium and, perhaps most ambitious, the infrastructure for just about any business to carry out its own e-commerce. The first phase of the mobile internet, which dawned in 2008 with the opening of the Apple App Store, has lasted more than a decade; the WeChat internet is almost certainly a glimpse of what comes next, for better or worse. Read more from Yiren Lu.

Government interference online

is getting worse.

State-sponsored disinformation is on the rise.

According to the Oxford Internet Institute, the number of countries with political disinformation campaigns nearly doubled to 70 in the last two years or so. Facebook remains the preferred platform for pushing propaganda; organized information operations were found on

the social network in 56 countries. Perhaps most terrifying, it has been reported that disinformation tactics are spreading around the world as countries learn from one another. The countries shaded on this map were found by Oxford to have either a permanent disinformation operation integrated into the government, temporary campaigns flaring up around elections or both. —Davey Alba

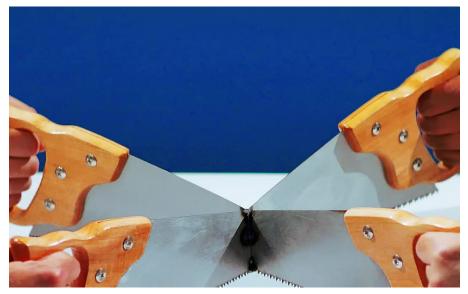
In Turkey and other nations living under censorship, the search for truth online becomes a

minefield. Under
President Erdogan's
censorship regime,
Turks can easily find
everyday information:
the size of an
earthquake tremor, the
source of a fire in a
nearby neighborhood,
the rate of their often-

Illustration by Mrzyk & Moriceau

depreciating lira. In 2016, they figured out in minutes that a military coup was underway. But Wikipedia and many other sites are banned, and an anti-government tweet or Facebook post can get you detained. The most insidious and damaging effect of this political purgatory is that many Turks may not even know what information they are missing. Read more from Suzy Hansen.

The American tech titans have





grown too big to maneuver.

Big Tech's physical footprint is monstrous.

Hyperscale data centers (each at least 100,000 square feet in size) run the internet, and they're growing like gangbusters, both in number and size. A year ago, there were 449 hyperscale centers in the world; today there are 504, with the biggest topping out at millions of square feet. A conservative estimate for their total

footprint is 125 million square feet, roughly the size of 2,170 football fields. One square yard of one of those "football fields" holds 1 petabyte of data: 250,000 DVDs worth. This chart shows the countries where hyperscale data centers are concentrated. — Martha Harbison

And the Silicon Valley titans have grown so enormous that they have begun to hem each other

in. The American tech giants have become less like companies and more like superpowers, creating a new world order that is increasingly hard to escape. Amazon is much more than a simple e-commerce

Illustration by Mrzyk & Moriceau

site; Google is much more than a search engine. To take on Facebook's expanding coalition of megaservices is implausible; the best a

competitor can do is create some sort of service that might steal away time or advertising dollars. Unfortunately for us and their would-be competition, theirs are empires we're stuck with for the foreseeable future. Unfortunately for them, they're also stuck with each other. Read more from John Herrman.

A digital-native culture



will just keep getting weirder.

In organizing and galvanizing fans, the internet is giving them absurd levels of cultural power. Online

fandoms have become like stateless nations, perpetuated through the imaginations and interrelations of those who enjoy and defend it. When their common cause comes under threat — through chart competition,

Illustration by Mrzyk & Moriceau

cancellation or critique — they organize, often even resorting to using the tools of politics. Now the fandom template has begun to attach to

more obscure or arcane media enterprises, like faceless meme makers and even podcasts. The profit model of the podcast world is arranged, through sites like Patreon, to capitalize on this type of fan relationship. But it's a relationship that also comes with significant costs. Read more from Jamie Lauren Keiles.

For teenagers growing up online, the internet is a playground of self-creation and reinvention.

Illustration by Mrzyk & Moriceau

The prevailing belief used to be that we had real selves and fake selves, and we cast judgment on the fakes. But in the popularity of YouTubers like Antonio Garza, a makeup-tutorial maven, teenagers can see the rise of a new 21st-century way of being. You can put on just about any persona you want with little or no risk, since with a costume change and some cosmetics-

removing wipes, you can simply make that persona go away. You can test out look after look after look, possibility after possibility. Arguably it is the dominant identity mode of our digital times, brought to us by teenagers who spend their days feeling like 10 different people at once and believe they can, and should, express them all. Read more from Elizabeth Weil.

Photo illustrations and video by Maurizio Cattelan and Pierpaolo Ferrari. Maurizio Cattelan is an Italian artist whose work has been the subject of numerous solo exhibitions, including at the Guggenheim Museum in New York and the Centre Georges Pompidou in Paris. Pierpaolo Ferrari is an Italian photographer and, along with Cattelan, is a founder of the magazine Toiletpaper, known for its surreal and humorous imagery. They want you to know that no animals were harmed in the making of these images — only humans.

Additional design and development by Jacky Myint.

The End